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Infantry Training

Volume I

INFANTRY PLATOON WEAPONS

PAMPHLET No. 2

FIELD CRAFT

(ALL ARMS)

1954

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By Command of the Army Council.

G. W. Funnell

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" " Part II	C 985	"How to see".
" " Part III	C 986	"How to observe".
" " Part IV	C 987	"What does the enemy see?" (Ground View).
" " Part V	C 988	"What does the enemy see?" (Air View).
	C 1009	"Dangerous journey".
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ABBREVIATIONS

LMG = Light machine gun
 NCO = Non commissioned officer
 OP = Observation post
 SAA = Small arms ammunition

RESTRICTED

INFANTRY TRAINING

Volume I

INFANTRY PLATOON WEAPONS

PAMPHLET No. 2

FIELDCRAFT

(All Arms)

1954

INTRODUCTION

Aim of weapon training

1. The aim of all weapon training is to produce soldiers who can kill the enemy in battle with any platoon weapon.

Achievement of the aim

2. To achieve this aim, men must reach a high standard of marksmanship, servicing and fieldcraft with all the weapons, and they must be able to work together as teams under good junior leaders.

3. Marksmanship and servicing are no good by themselves; a man must also be expert at fieldcraft; he must be able to:—

- (a) Use his eyes and ears to find the enemy, without being seen himself.
- (b) Make the best use of ground and cover.
- (c) Judge distances accurately.
- (d) Indicate and recognize targets, obey fire control orders, and understand fire discipline.
- (e) Act as a sentry in a forward area, and know exactly what he is responsible for.
- (f) Move silently, with or without weapons, stores or equipment.
- (g) Act aggressively on his own, out of sight and earshot of his comrades.
- (h) Be alert, confident and cunning whatever happens.

4. A skilled man without the "guts" to do his job in battle is useless. Soldiers need to be tough, physically and morally; but the training—assault courses, route marches, long exercises and so on—must work up gradually; the men will reach the required standard quicker, if they come successfully through a series of tests that are easy to start with, and gradually get harder, than if they are suddenly made to try something that is too much for them.

5. Individual fieldcraft training is an excellent way of developing character; and if promising soldiers are allowed to lead teams in fieldcraft exercises, and act as assistant instructors and umpires, they will learn a lot about leadership. Instructors can do more in peace time for morale in war, by developing men's characters and training them to lead, than in any other way.

The place of fieldcraft in the training syllabus

6. Fieldcraft is an integral part of weapon training. Unless a man learns marksmanship and servicing (technical handling), and fieldcraft (battle handling), at the same time, his progress towards becoming a fighting soldier suffers.

7. The first lesson in fieldcraft, Visual Training—Introduction, should come soon after a man has started on the rifle; and thereafter he should learn weapon and fieldcraft lessons side by side.

The aim of the pamphlet

8. This pamphlet contains the material that an instructor needs to teach recruits individual fieldcraft.

Layout

9. The pamphlet is in two chapters:—

- (a) Chapter 1 contains the lessons that recruits must learn, and practice periods to drive home the skills and techniques that they have learnt.
- (b) Chapter 2 contains more information, to help instructors to understand the subject and its presentation better.

10. Two forms of printing are used:—

- (a) Portions in ordinary type are notes for instructors.
- (b) Portions in *italics* are what instructors should teach recruits.

Method of instruction

11. The way to teach fieldcraft is to give the recruits demonstrations, including films, and explain to them what they are seeing, and then as soon as possible make them practice what they have seen.

Lesson plans

12. For the benefit of instructors who lack the experience or the time to devise their own lessons, most of the lessons are fairly detailed.

13. The lessons are designed for average recruits introduced to the subject for the first time; they may prove unsuitable for many reasons, of which the most important are the intelligence and knowledge of the recruits, and the time and training facilities available.

14. Instructors should study *Successful Instruction*, 1951 (WO Code No. 8670), and deviate from the exact form of the lessons as much as circumstances dictate. Best of all, they should produce their own lesson plans, and be allowed to refer to them during the lessons.

Demonstrations

15. Demonstrations must be carefully prepared and rehearsed, whether they are on a big scale, or just the instructor showing his squad how to crawl. Poor demonstrations are of little value.

Length of periods

16. Fieldcraft does not lend itself to strict 40 minute periods. Some lessons and practices need far longer, and others are best combined into a day and night exercise.

CHAPTER 1.—INSTRUCTIONAL LESSONS

LESSON 1.—VISUAL TRAINING—INTRODUCTION

AIM

1. To introduce visual training, and to teach why things are seen.

STORES

2. Visual Training Film, Part I, "Why things are seen", B/C 984 (10 minutes).
3. If the film is not available, give an indoor or outdoor demonstration.

APPROACH

4. Explain:—

- (a) *Visual training is training in observation and concealment.*
- (b) *To OBSERVE is to see through the enemy's CONCEALMENT; to CONCEAL yourself is to defeat his OBSERVATION. Once you are trained in both, you can find and kill the enemy without being seen.*
- (c) *You can find out a lot about the enemy by watching him; by concealing yourself you can deceive him, and, if he attacks, you can meet him with short range fire from where he least expects it.*
- (d) *The important things are:—*
 - See without being seen.*
 - Notice details.*
 - Learn to understand the meaning of what you see, and make the right deductions.*

DEMONSTRATION

5. Introduce the film or demonstration.
6. Explain, as a commentary on the film or demonstration.—*These are the things that make any object visible:—*
 - (a) *Shape.*—You can recognize some things instantly by their shape, particularly if it contrasts with the surroundings. If you want to hide, three of the distinctive shapes to disguise are the smooth, round top of your steel helmet, the hard line of its brim, and the square outline of your pack.
 - (b) *Shadow.*—In sunlight an object may cast a shadow that gives it away. Always keep in shade, if you can; the shade itself affords cover, and there is no tell-tale shadow. Remember that as the sun moves, so do the shadows.
 - (c) *Silhouette.*—Anything silhouetted against a contrasting background is conspicuous. Any smooth, flat background, like water, a field or worst of all, the sky, is dangerous. Always try to put yourself against an uneven background, such as a hedge, trees, a bush, or broken ground. A thing may be silhouetted if it is against a background of another colour.
 - (d) *Surface.*—If anything has a surface that contrasts with its surroundings, it is conspicuous. Shiny helmets and white skin contrast violently with most backgrounds, and need disguising.
 - (e) *Spacing.*—In nature things are never regularly spaced. Regular spacing means man-made objects.
 - (f) *Movement.*—Nothing catches the eye quicker than sudden movement. However well you are concealed, you will give yourself away when you move, unless you are careful.

CONCLUSION

7. Questions from and to the class about the demonstration or film.
8. Repeat the things that make objects easy to see (para 6).

LESSON 2.—JUDGING DISTANCE—UNIT OF MEASURE

AIM

1. To teach recruits how to judge by unit of measure.

STORES

2. Four large and twelve small flags, signal flag, whistle and range cards.

NOTES

3. Put out the large flags 100 yards from a central view point, so that they can be seen across different types of ground, rising, falling or flat, and open or broken.

4. Choose a number of objects up to 400 yards from the view point, and lay a small flag every 100 yards between view point and objects, but so that the men cannot see them from the view point. Distances must be accurate.

5. When the men have judged a range, always make them set their sights at it; they get practice in sight setting, and they are not influenced by other men's answers.

APPROACH

6. *It is important to be able to judge distances right, so that fire may be fully effective, and observers' reports accurate on this point.*

7. *There are several ways to judge distance; this lesson deals with a way known as the "unit of measure".*

THE UNIT OF MEASURE

8. Explain:—

- (a) *Take 100 yards as your unit, and see how many units you can fit in between yourself and the object.*
- (b) *This method is no good unless you can see all the ground between yourself and the object, nor for distances over 400 yards.*

9. Get the men to look at the large flags from all firing positions, and try to remember what 100 yards looks like. Show them how difficult it is, if there is any dead ground between them and the object.

10. For practice, make the men put themselves 100 yards from a given object. Discuss each man's error with him, and go on until the men get consistent results. Some men may consistently over-estimate or under-estimate; they must remember this when fitting in their 100 yard units.

11. Get the men to judge the distance to the objects that you chose before the lesson, and to show you how they fitted in their units. Then get someone to put up the small, 100 yards flags, and discuss the men's results with them.

CONCLUSION

12. Questions from and to the squad.
13. Sum up.

LESSON 3.—JUDGING DISTANCE—APPEARANCE METHOD

AIM

1. To teach recruits how to judge distances by the appearance method.

STORES

2. Rifles, signal flags, aiming rests, range cards.

NOTES

3. Before the lesson starts, station men (or Figure 10 targets) up to 600 yards away, and choose or put out other things—trees, bushes, vehicles, etc—up to 1,000 yards; and measure the distance to each.

4. If a classification range is available, put the objects on, or in line with, the firing points.

PRELIMINARIES

5. Safety precautions.

6. Revise 'Unit of measure' (Lesson 2).

APPROACH

7. *Another way to judge the distance to an object is to study what it looks like compared with its surroundings; this is called the appearance method. It takes a lot of practice, under varying conditions, to become good at it.*

CONDITIONS THAT AFFECT APPEARANCE

8. *Things seem closer than they are, when:—*

- (a) *The light is bright, or the sun is shining from behind you.*
- (b) *They are bigger than other things around them.*
- (c) *There is dead ground between them and you.*
- (d) *They are higher up than you are.*

9. *Things seem farther away than they are, when:—*

- (a) *The light is bad, or the sun is in your eyes.*
- (b) *They are smaller than other things around them.*
- (c) *You are looking across a valley, or down a street, or a ride in a wood.*
- (d) *You are lying down.*

10. Question the squad.

DEMONSTRATION

11. Show the squad what men look like up to 600 yards away, and what other things look like up to 1,000 yards away; point out how the prevailing conditions affect their appearance.

PRACTICE

12. Make the squad judge the range to various men and objects. Set a time limit for each problem, and tell the men to set their sights at the estimated range.

CONCLUSION

13. Questions from and to the squad.

14. Sum up.

LESSON 4.—ELEMENTARY OBSERVATION

AIM

1. To teach elementary observation.

STORES

2. Visual Training film, Part III, "How to observe", B/C 986.

3. Bits of military equipment—boots, weapons, etc.

4. Visual Training Poster No. 4, "Methods of scanning" (WO Code No. 7109).

5. Rifles and aiming rests.

NOTES

6. Choose a piece of ground with folds, bushes, trees, banks, hedges, etc. Make sure it can be divided into foreground, middle distance and distance.

7. Put out the bits of equipment (para 3), so that some are fairly easy to see, and some more difficult, and so that they provide varying degrees of contrast of colour, tone, surface, shape and shadow.

PRELIMINARIES

8. Question the men on why things are seen (Lesson 1).

HOW TO SEARCH

9. Explain the aim of the lesson. Show the film.

10. If the film is not available, explain.—*The normal way to search ground is to divide it into foreground, middle distance and distance, and search each of them, in that order, from right to left. In that way you are sure that you do not leave out any of the ground; but there are other ways of dividing the ground up, which may sometimes be better, particularly if the ground is very broken.*

PRACTICE

11. Get the men to divide the ground into foreground, middle distance and distance. Discuss their answers with them.

12. Tell the men to search the area, and write down the bits of military equipment that they see.

13. Ask the men what they have seen, why some things were easier to see than others, and how they identified things of which they could only see part. If you are not sure that a man has seen the right thing, make him aim at it with his rifle in the aiming rest.

CONCLUSION

14. Questions from and to the squad.

15. Show Visual Training Poster No. 4.

16. Sum up, and point out how observation and concealment are related.

LESSON 5.—RECOGNITION OF TARGETS

AIM

1. To teach recruits how to recognize targets.

STORES

2. Rifles and aiming rests, range card, landscape targets, diagrams and blackboard.

NOTES

3. Recruits get false impressions about direction from landscape targets; so teach the lesson in the open if you can. If you have to use landscape targets, remember that:—

- (a) It is impossible to judge distances.
 - (b) The landscape is so narrow that no target on it can be more than slightly left or right. Three adjoining landscape panels give better results, if the men are not more than ten yards away from them.
4. Choose your ground carefully, and pick the sort of target that men might have to recognize in battle, and at realistic ranges.
 5. Have a diagram of the clock ray to use on the landscape target; the best sort of diagram is black figures on talc.
 6. The sequence for instruction in recognition is:—
 - (a) Indicate the target.
 - (b) Order "Aim".
 - (c) Check the aims, and discuss them.
 7. Examples are given, but is it always better to choose your own examples on the ground.

PRELIMINARIES

8. Safety precautions. Rifles in aiming rests.

APPROACH

9. When your section commander indicates a target, you must be able to recognize it, so that you can shoot at it. To make it easier, there are certain methods of indication that everyone uses.

ARCS OF FIRE

10. Explain and demonstrate.—It is easier to recognize a target if you know the area in which it is likely to be; such an area is known as an arc of fire. When your section commander shows you the arc of fire, he:—

- (a) Points out the axis, or middle, of the arc.
- (b) Shows you its left and right boundaries.
- (c) Points out a number of prominent objects, or reference points, which must be easy to identify and a reasonable distance apart, gives each one a name, and tells you the range to it; and if any object is large, like a copse, tells you what bit of it he is using as the reference point.

METHODS OF INDICATION

11. *Direct method.*—Explain and demonstrate:—

- (a) Obvious targets are indicated by what is known as the direct method.
- (b) The section commander tells you the range and where to look, and describes the target; the terms he uses are:—
 - (i) "Axis of the arc", for targets on or very near the axis.
 - (ii) "Left" or "right", for targets 90 degrees from the axis.
 - (iii) "Slightly", "quarter", "half" or "three quarters", and "left" or "right", for targets between the axis and "left" or "right".

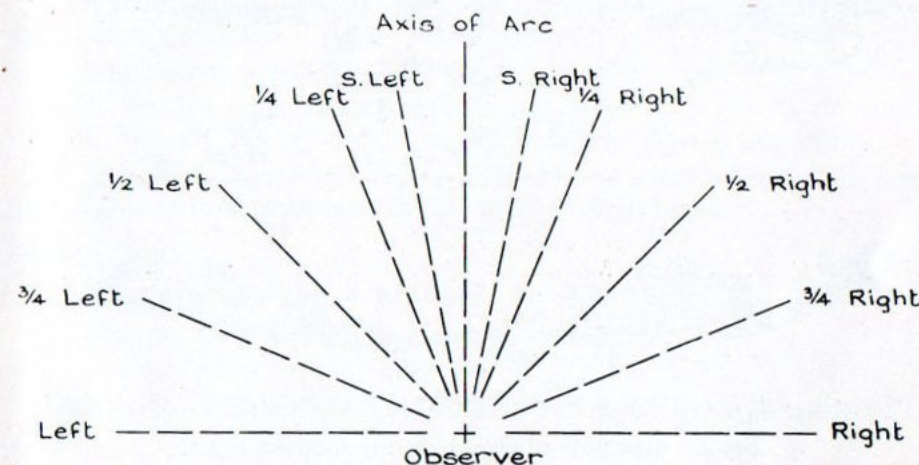


Fig 1.—The direct method.

(c) An example might be "300—half right—lone bush".

12. *Reference points.*—Explain and demonstrate:—

- (a) For less obvious targets, the section commander may use reference points and the direct method together, and perhaps "above" or "below" as well.
- (b) Examples are:—
 - (i) "300—bushy topped tree (the reference point)—slightly right—small bush (the target)".
 - (ii) "200—corner of copse—slightly right and below—small bush".

13. For practice, indicate some targets to the squad by the direct and reference point methods.

14. *Clock ray.*—Explain and demonstrate:—

- (a) For more difficult targets, the section commander may use a reference point and a clock ray.
- (b) Imagine a clock face standing up on the landscape with its centre on the reference point. If you have a talc clock face, put it against the landscape target.

- (c) To indicate a target, the section commander tells you the range, the reference point, and whether the target is to the right or left of it, and the appropriate hour on the clock face, to give you the direction to look in from the reference point.
- (d) An example is "300—windmill—right—4 o'clock—small bush". (See Fig 2.)

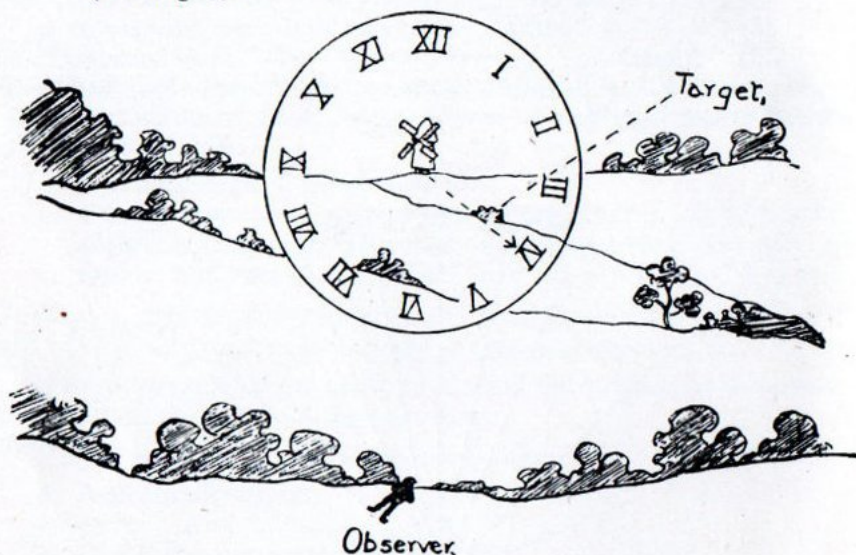


Fig 2.—Example of the clock ray method in use.

15. Give the squad some clock ray indications for practice.
16. Further practice in all methods, if there is time.

CONCLUSION

17. Questions from and to the squad.
18. Sum up.

PRACTICE 1.—INDICATION OF TARGETS

AIM

1. To exercise recruits and, if necessary, NCOs and trained men in indicating and recognizing targets by the methods taught in Lesson 5.

STORES

2. Rifles, aiming rests, range cards.

NOTES

3. Keep to the indication of realistic targets; do not get involved in fire control orders.
4. Later periods give more practice in indicating targets.

PRELIMINARIES

5. Safety precautions. Rifles in aiming rests.
6. Organize an arc of fire.

PRACTICE

7. Tell the men what method of indication they are to use, and give them an example.
8. Make the men turn their backs; lay a rifle in its aiming rest on a suitable target; pick a man, and make him look along the sights and identify the target; knock the rifle off aim; and turn the men about.
9. The chosen man indicates the target to the others, who aim their rifles at it; check their aims.
10. Criticize the indication under these headings:—
- Was the range about right?
 - Was the indication clear, sufficient, and as short as possible?
11. Repeat as often as is necessary for everyone to get practice. As time goes on, leave it to the men to decide what methods to use.

CONCLUSION

12. Questions from and to the squad.
13. Sum up, and comment on the standard reached.

LESSON 6.—PERSONAL CAMOUFLAGE AND CONCEALMENT AIM

1. To demonstrate and practise personal camouflage and concealment.

DRESS AND STORES

2. Battle order, helmet nets, scrim, camouflage cream, burnt cork and water. Improvised camouflage materials such as sacking, foliage and grass. Signal flag and whistle.

NOTES

3. Group several squads together for the demonstration, and use their NCOs as demonstrators.
4. Choose ground with all types of cover on it—hedgework, wall, bushes, folds, banks, etc.
5. The demonstration will be most effective, if you can rehearse it immediately before you give it.
6. Figs 3—10 illustrate the sort of situations to demonstrate; show the wrong way and the right in each case, and get the men to search the area where the demonstrators are.
7. It is possible to demonstrate and practise personal camouflage indoors, but not the rest of the lesson.

PRELIMINARIES

8. Safety precautions.

APPROACH

9. *You must know how to camouflage and conceal yourself in battle, or you will be an easy target for the enemy.*

DEMONSTRATION

10. Explain and demonstrate.—*The tone and colour of your hand, neck and face, and the shape, surface and silhouette of your helmet and pack, must not contrast with their backgrounds. To avoid these contrasts:—*

- (a) *Put camouflage cream, mud, burnt cork, or something similar on your face, neck and hands: put on more for night work than for day (Fig 3).*
- (b) *Put a hessian cover on your helmet to dull the shine, a net on top of that to hold scrim, etc, and garnishing in the net to disguise the helmet's distinctive shape, particularly the shadow under the brim (Fig 4).*
- (c) *Tie string across your pack, and use it to hold foliage, etc, to break up the pack's outline (Fig 3).*
- (d) *You may have to camouflage your weapon by binding scrim or hessian round shiny metal or wood parts; but be careful that none of it blocks your view over the sights.*

11. Divide the men into pairs, and make each pair practise personal camouflage as master and pupil, while the NCOs move to their places for the next part of the demonstration.

12. Explain and demonstrate:—

- (a) *Look round or through cover, rather than over it (Fig 5); if you have to look over it, try not to break a straight line (Fig 6).*
- (b) *Avoid skylines (Fig 7).*
- (c) *Use shadow, and remember that when you are in the sun, your own shadow is very conspicuous, and that shadows move with the sun (Fig 8).*
- (d) *Choose a background to match your clothes (Fig 9).*
- (e) *Avoid isolated cover; the enemy is likely to watch it, and it is easy to give a fire order onto (Fig 10).*
- (f) *Try not to be seen going into or leaving cover.*
- (g) *Move carefully.*

CONCLUSION

13. Sum up the demonstration.

14. Questions from and to the squad.

15. Stress these points again:—

- (a) *The aim of camouflage and concealment is to escape observation by the enemy.*
- (b) *If you want to kill without being killed, learn to see without being seen.*



Too much

Too little

Just right

For daylight



Fig 3.—Personal camouflage.



Fig 4.—Camouflaging the steel helmet.



Fig 5.—Looking through or round, not over cover.



Fig 6.—Looking over cover, without breaking a straight line.

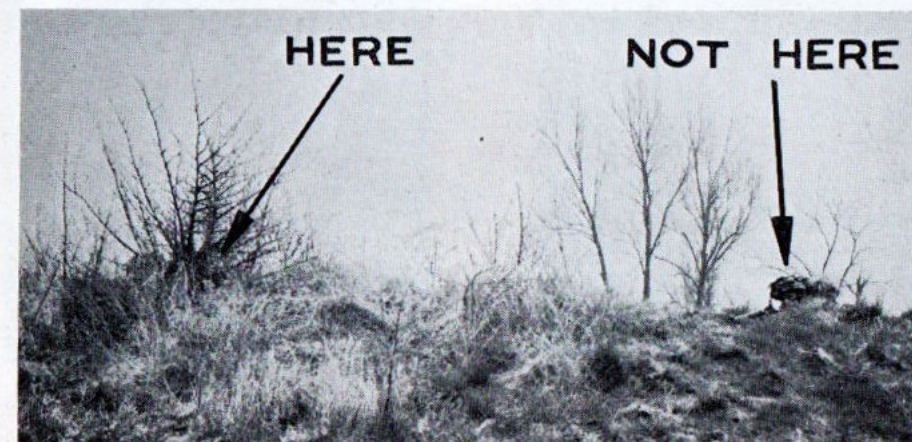


Fig 7.—Avoiding a skyline.

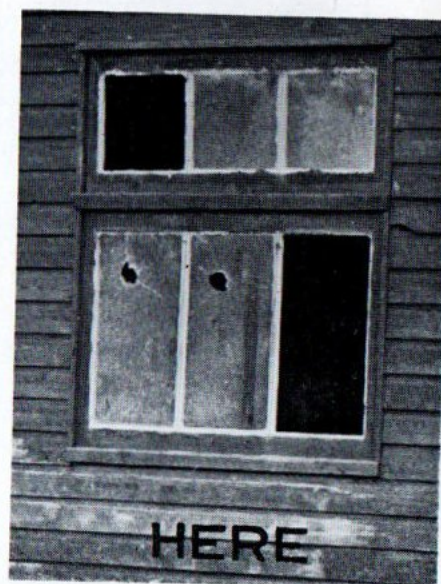


Fig 8.—Use of shadow.



Fig 9.—Background.

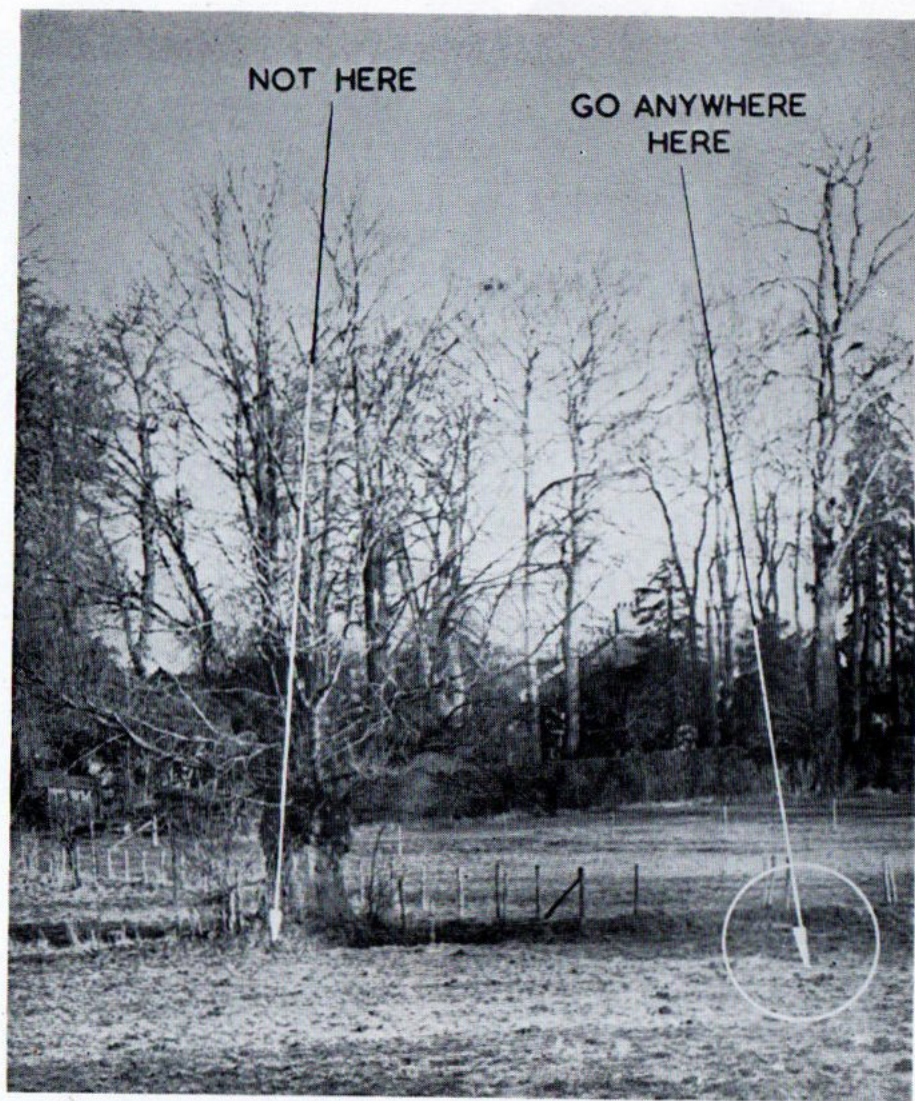


Fig 10.—Avoiding isolated cover.

PRACTICE 2.—CONCEALMENT AND CAMOUFLAGE

AIM

1. To practise personal camouflage, concealment, searching and target indication.

DRESS AND STORES

2. Battle order, camouflage equipment, range cards.

NOTES

3. Choose a piece of ground with all sorts of cover on it. Make out an accurate range card to help you with the practice in target indication.

PRELIMINARIES

4. Safety precautions.

APPROACH

5. *Your lives may depend on your being able to see without being seen. You are now going to practice camouflage, concealment and observation.*

PRACTICE

6. Tell the men to camouflage themselves, working in pairs.
7. Divide the men into two teams; give the first team five minutes to conceal themselves in positions from which they can observe the second team; give them a piece of ground to work in, and tell them that their position must be between 50 and 100 yards away.
8. While the first team are getting into position, turn the second team about, and practise them in target indication. At the end of five minutes, get the second team to search the ground where the first team are concealed. When any of them spots a man of the first team, he should tell you and his team-mates, and say what it was that gave the man away.
9. If any members of the first team are not spotted after a reasonable time, signal to them to move about until they are.
10. Collect all the men together, discuss results, and repeat the practice with the teams changed round, and on different ground.

CONCLUSION

11. Questions from and to the squad.
12. Sum up what has been achieved.

LESSON 7.—MOVING WITH AND WITHOUT RIFLES

AIM

1. To teach recruits how to move with and without rifles.

DRESS AND STORES

2. Battle order, rifles.

NOTES

3. You need a stretch of hard road for the men to practise walking silently on.

PRELIMINARIES

4. Safety precautions.

APPROACH

5. *You need to know how to move about in battle, and how to use ground, so that you can close with the enemy, and occupy and leave positions, without the enemy seeing you or being able to shoot at you.*

METHODS OF MOVEMENT

6. Explain and demonstrate each method; then divide the men into pairs, and make them practise the method that they have just seen, as master and pupil, without equipment.

7. The monkey run (Fig 11):—

- (a) *It is simply crawling on hands and knees.*
- (b) *It is useful behind cover about two feet high.*
- (c) *You can go quite fast, but the faster you go, the more noise you make.*
- (d) *If you really want to be quiet, always choose a safe place (with no twigs to crack, etc) to put your hands, and then put your knees exactly where your hands have been.*
- (e) *Keep your backside and head down, but observe as you go.*
- (f) *If you have a rifle, hold it at the point of balance with your left hand, and see that no dirt gets into the muzzle.*

8. The leopard crawl (Fig 12):—

- (a) *It is crawling on elbows and the inside of the knees.*
- (b) *It is useful behind very low cover.*
- (c) *Propel yourself along by alternate elbows and knees, and roll your body a little as you bend each knee; or let one leg trail behind, and use only one knee. Keep your heels, head, body and elbows down, but observe as you go.*
- (d) *If you have a rifle, hold it either with your right hand on the small of the butt and your left hand at the point of balance, with the bolt uppermost, or by the front of the sling with your right hand, with the rifle rested on your right arm, and the muzzle forwards.*



Fig 11.—The monkey run, with and without a rifle.



Fig 12.—The leopard crawl, with and without a rifle.

9. The roll (Fig 13):—

- (a) *It is often the quickest way of getting away from a spot, such as a crest line, where the enemy has seen you.*
- (b) *Roll with you arms, and your rifle, if you have one, close in to your side.*

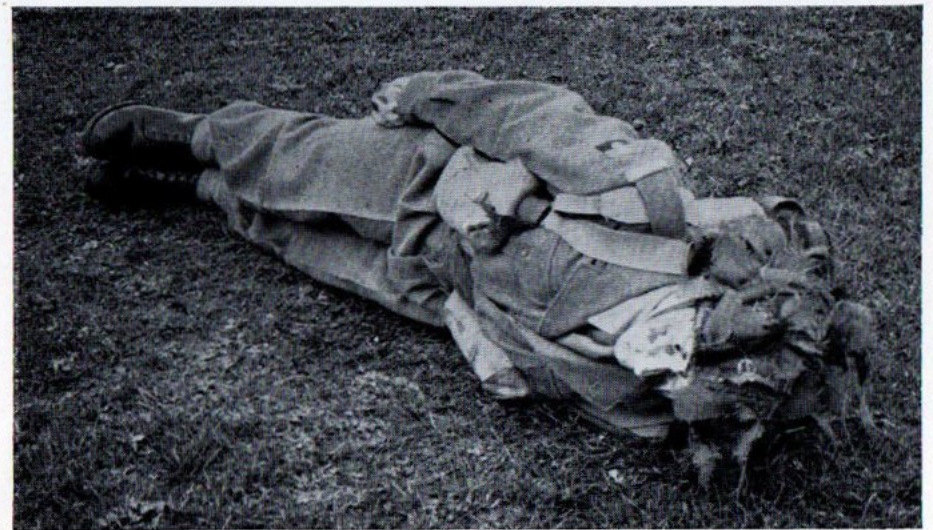


Fig 13.—The roll, with and without a rifle.

10. The walk (Fig 14):—

- (a) *Hold your rifle so that you can use it instantly. Your whole attitude must be alert, with your head up so that you can observe*
- (b) *To be really quiet on hard ground, put the edge of the sole of your boot down first. To keep your balance, keep your knees slightly bent.*



Fig 14.—The walk.

11. Give the men more practice in all methods of moving, with equipment on.

CONCLUSION

12. Questions from and to the squad.
13. Sum up.

LESSON 8.—MOVING WITH LMGs

AIM

1. To teach recruits how to move with LMGs.

STORES

2. LMGs with slings attached.

NOTES

3. When you demonstrate how two men can crawl with a gun, use a recruit as your assistant.

PRELIMINARIES

4. Safety precautions. Load guns.

APPROACH

5. *You move with an LMG much the same as you do with a rifle, and have to decide for yourself which crawl to use.*
6. *Only constant practice will make you good at it.*

METHODS OF MOVEMENT (ONE MAN ALONE)

7. Explain and demonstrate each method of movement; then divide the men into groups, and make them practise the method that they have just seen, as masters and pupils.

8. The leopard crawl (Fig 15):—

- (a) *The leopard crawl is very much the same as with a rifle.*
- (b) *Hold the small of the butt with your right hand, the folded bipod with your left.*



Fig 15.—The leopard crawl.

9. **The leopard crawl (second method).**—*Push the gun forward with both hands as far as you can; then use your knees, in the leopard crawl position, to move your body forward.*

10. **The side crawl (Fig 16):**—

- (a) *Lie on either side, hold the gun by its carrying handle with your upper hand, and rest the butt on your lower leg.*
- (b) *Use your upper foot and lower elbow to push you along.*



Fig 16.—The side crawl.

11. **The knee crawl (Fig 17):**—

- (a) *Use the knee crawl behind waist high cover.*
- (b) *Kneel on your right knee, with your right fist flat on the ground. Hold the gun with your left hand by the carrying handle; rest your thumb on your knee to take some of the weight of the gun off your arm.*
- (c) *To advance, move your left foot and right fist forwards together, and bring your right knee up to them, and so on.*

METHODS OF MOVEMENT (IN PAIRS)

12. **The combined leopard crawl (Fig 18):**—

- (a) *The two men lie side by side, with No. 2 slightly in front; No. 1 holds the small of the butt with his left hand, No. 2 the bipod with his right. Keep the gun pointing forwards.*
- (b) *Both men leopard crawl as they would with rifles, but their inside legs and their outside legs must keep step.*



Fig 17.—The knee crawl.

13. **The combined leopard crawl (second method) (Fig 19):**—

- (a) *It is the same as the ordinary combined leopard crawl, except that the two men are level with each other, and they have the gun on its side, with the magazine to the front.*
- (b) *It takes longer to get the gun into action.*

14. **The combined leopard crawl by bounds.**—*It is the same as the ordinary combined leopard crawl, except that the men crawl forward as far as they can without letting go of the gun, and then lift the gun as far forward as they can, and so on.*



Fig 18.—The combined leopard crawl.



Fig. 19.—The combined leopard crawl (second method).

CONCLUSION

15. Questions from and to the squad.
16. Sum up.

LESSON 9.—AIDS TO JUDGING DISTANCE

AIM

1. To teach and practise the use of aids to judging distance.

STORES

2. Rifles and range cards.

NOTES

3. All your ranges must be accurately measured.
4. One instructor can take several squads, while the others go out in front to illustrate the halving method.
5. Make the men practise in proper firing positions.

PRELIMINARIES

6. Safety precautions.
7. Revise judging distance by unit of measure and appearance (Lessons 2 and 3).

APPROACH

8. *You already know the two main ways of judging distance, but there are several other devices to help you.*

AIDS TO JUDGING DISTANCE

9. Explain and demonstrate each aid, and then make the men practise it.
10. **Halving.**—*Choose a point that you think is half way to your target; estimate the distance to that point, and double it.*
11. **Bracketing.**—*Say to yourself "The target could not be more than x yards, nor less than y yards, away"; add x to y and halve the result; the answer is the range. For instance, if x is 1,000 and y 600, the range is 800. The farther the target is away, the wider should be your bracket.*
12. **Key ranges.**—*If you know the range to any point in your arc, you can estimate the distance to other objects from it.*
13. **Unit average.**—*Get several men to judge a distance, and take the average of their answers.*
14. Practise the two methods and the aids, checking one against another.

CONCLUSION

15. Questions from and to the squad.
16. Sum up.

PRACTICE 3.—MOVEMENT AND OBSERVATION

AIM

1. To give men practice in movement and observation.

DRESS AND STORES

2. Battle order. Rifles, flags, camouflage materials.

NOTES

3. The practice can be run as a competition.
4. Choose a course about 50 yards long, and divide it into four equal sections; mark the end of each section with a flag. The course should entail crawling on hands and knees, and on elbows and knees, and crossing a small gap. A skilful, agile man should be able to complete it in ten minutes without being seen. Give marks for each section that a man completes unseen; a suggestion is 2 for the first section, and 4, 6 and 8 for the other three.

PRELIMINARIES

5. Safety precautions and personal camouflage.

APPROACH

6. *The aim of this period is to give you realistic practice at moving and observing.*

CONDUCT OF THE PRACTICE

7. Paint a simple tactical picture, and point out the route and the flags, and that a NCO is observing from the last flag.
8. Explain the marking, how the competition will work, and the time limit.
9. Start the men off one by one at intervals. If a man is seen, tell him why, and let him try again. Men who succeed should stay near the last flag and observe.

CONCLUSION

10. Tell the men who has won.
11. Sum up the lessons learnt.

LESSON 10.—LOCATING THE ENEMY

AIM

1. To accustom recruits to the sound of shots coming towards them, to teach them to locate the enemy by his fire, and to give them further practice in judging distances, and in recognizing and indicating targets.

DRESS AND STORES

2. Battle order. LMGs and tripods, rifles, SAA ball and tracer, thunder-flashes.

NOTES

3. The men should already have seen Visual Training Film, Part III, "How to observe", B/C 986 (less the second part).

4. The best site is a field firing area with a good variety of cover, and a foreground, middle distance and distance that are easy to define.

5. The "crack and thump" demonstration needs careful rehearsal. Firers should be experienced NCOs and good shots, and have definite targets to aim at; weapons must be zeroed, and LMGs fired from tripods. Make it easy to see some of the firers, difficult to see others.

6. Obey local safety regulations, and see Infantry Training, Volume III, Pamphlet No. 33, 1952 (WO Code No. 8713), Chapter 4.

PRELIMINARIES

7. Safety precautions.
8. Revise concealment (Lesson 6).

APPROACH

9. Explain the aim of the lesson.

DEMONSTRATION OF "CRACK AND THUMP"

10. Explain.—*When a bullet passes anywhere near you, you hear two noises; first the "crack" of the bullet passing, and then the "thump" of the weapon being fired. Take no notice of the "crack"; concentrate on the "thump"; it may help you to locate the firer.*

11. Signal to all the demonstration NCOs to fire for ten seconds.

12. Explain.—*You always hear the "crack" before the "thump" because the bullet travels faster than sound. The farther away the weapon, the longer the interval between "crack" and "thump". Get demonstrators at 300 and 600 yards to fire two or three shots each alternately. Explain.—From that interval you can judge roughly how far away the firer is; this may help you to spot him.*

13. Get each demonstrator to fire in turn, first those in the foreground, then those in the middle distance, and finally those in the distance. Explain:—

- (a) *Listen to the interval between "crack" and "thump", and try to judge the range from it.*
- (b) *Listen to the "thump", and judge the firer's direction from it.*
- (c) *Having got an idea of direction and range, look there for smoke, flash or movement.*

14. Question the men, and repeat as necessary.

EXERCISE

15. Move the demonstrators to new positions without the men seeing them. Arrange signals on which they will fire, or make quick or slow movements.

16. Get the men into proper positions of observation, and tell them to search the foreground for targets. Make the demonstrators fire or move from time to time. Too add realism, let off thunderflashes near the observers. When a man finds a target, ask him what it was he spotted.

17. Repeat for the middle distance and distance. Finally get all the demonstrators to fire for ten seconds.

CONCLUSION

18. Questions from and to the squad.

19. Sum up the lessons learnt.

LESSON 11.—FIRE CONTROL ORDERS

AIM

1. To teach recruits what to do when they are given fire control orders.

STORES

2. Rifles, aiming rests, landscape targets and range cards.

NOTES

3. You can adapt this lesson for training NCOs in giving fire control orders. Teach them what is contained in Chapter 2, Section 2. Get them to give fire control orders, and criticize them as suggested in para 11 of that same section.

4. Use landscape targets, harmonized sights and live .303 or .22 ammunition to give recruits or NCOs further practice.

PRELIMINARIES

5. Safety precautions. Rifles in aiming rests. Organize an arc of fire.

6. Revise recognition of targets (Lesson 5).

APPROACH

7. Your section commander gives you a fire control order so that you may recognize the target, and fire at it effectively. Your duty is to obey the order implicitly, and allow for wind when you aim.

SEQUENCE

8. Explain.—*There is an unvarying sequence for fire control orders; the word "GRIT" will help you to remember it:—*

- (a) *G for Group—"No. 1 Section", "Bren group" or "Rifle group", so that you know whether you are being addressed.*
- (b) *R for Range—So that you can set your sights, and know how far away to start looking for the target.*
- (c) *I for Indication—So that you know what to look for, and in what direction to look.*
- (d) *T for Type of fire—So that you know whether to fire slow or rapid, in single rounds or bursts, etc.*

TYPES OF FIRE CONTROL ORDERS

9. Explain each type, and give an example on the ground or on the landscape target, rather than the one given here. Then practise the men at acting on each type.

10. *Full fire control orders are only given if there is time. Example.—"Bren group—300—ruined house—left end—enemy machine gun—bursts—fire".*

11. *Brief fire control orders are given when there is little time and the target is obvious. Example.—"Sights down—quarter left—rapid—fire".*

12. *Delayed fire control orders are used when the section commander can guess what either our own attacking troops or the enemy are going to do; he gets his men ready to open fire, but waits till the right moment to order "Fire". Examples:—*

- (a) *"No. 5 Section—300—farm house—immediately below—enemy in hedgerow—No. 6 Section is moving through the copse on our right; we are going to cover their advance when they get to the open—rapid—await my order—" then when No. 6 Section is about to come into the open, "Fire".*
- (b) *"No. 3 Section—200—quarter right—small wood—when the enemy comes out this side—rapid—" then, when the enemy are in a suitable position, "Fire".*

13. *Individual fire control orders give you a chance to fire quickly when a target appears. Example.—"No. 3 Section—200—slightly left—farm buildings—enemy in that area—watch and shoot when you see a target".*

14. *Tracer may be used for a difficult target, or to indicate a target to a tank. Example.—"No. 1 Section—300—watch this tracer—where it hits—fire"*

15. Give the squad fire orders of all types, and make them act on them for practice.

CONCLUSION

16. Questions from and to the squad.
17. Sum up.

PRACTICE 4.—FIRE CONTROL ORDERS

AIM

1. To give practice in recognizing targets and obeying fire control orders.

STORES

2. Range cards; other items according to the type of practice.

NOTES

3. Men can become proficient only by constant practice.

CONDUCT OF THE PRACTICE

4. Vary the practice; suggestions are:—
 - (a) Use the aiming rests and natural targets for elementary practice.
 - (b) Give the men blank; give fatiguemen, previously rehearsed, blank too, and make them act as realistic targets.
 - (c) Firing with harmonized sights on a 25-yards or miniature range. See Infantry Training, Volume 1, Pamphlet No. 3, 1955, (WO Code No. 8903), Chapter 2, Section 9*
 - (d) Miniature range battle practices. See Infantry Training, Volume I, Pamphlet No. 12, 1949 (WO Code No. 8419), Appendix A.
 - (e) Field firing.
5. Always discuss probable fire effect with the men after a practice. See Chapter 2, Section 2, para 11.

LESSON 12.—ELEMENTARY OBSTACLE CROSSING

AIM

1. To teach recruits how to get over obstacles.

DRESS AND STORES

2. Battle order. Rifles, LMGs with magazines and slings, figure targets, wire cutters.

*To be published,

NOTES

3. Prepare a course with the various types of obstacles on it.
4. See also Basic and Battle Physical Training, Part V (WO Code No. 7048), Chapter 3. Unit APTC instructors can help with this lesson.

PRELIMINARIES

5. Safety precautions.

APPROACH

6. *The quicker and better you can cross obstacles in battle, the less likely you are to be seen and shot while doing it; this requires practice and teamwork.*

HOW TO CROSS OBSTACLES

7. Move from obstacle to obstacle, explaining and demonstrating at each; then make the men try for themselves.

8. Wire:—

- (a) *Crawl under it if you can.*
- (b) *It may be possible for one man to lie on the wire and flatten it down a bit, and for the others to climb over his body.*
- (c) *If you have to cut wire, get someone to hold it on both sides of the cutter; if you do not do this, it will fly apart, make a noise, and possibly hit you in the face.*

9. **Gates and wooden fences.**—*The best way is to crawl under them; the next best is to vault over them.*

10. **Walls.**—*Help one another up, and roll across the top, keeping flat. Be careful of your weapons; do not drop them over the wall.*

11. **Ditches, streams, hedges and gaps are likely to be covered by fire; cross them as fast as you can.**

12. Give the men practice over the whole course. They should work on their own, or in teams of two or more, according to the obstacle. See that they get into fire positions, and watch for enemy, when they have crossed an obstacle.

CONCLUSION

13. Questions from and to the squad.
14. Sum up what the men have achieved.

PRACTICE 5.—CROSSING OBSTACLES

AIM

1. To practice teamwork over obstacles.

DRESS AND STORES

2. Battle order. Camouflage materials, LMGs with slings, holdalls and magazines, utility pouches and ammunition boxes suitably weighted.

NOTES

3. This practice is not the same as an assault course, which is the next stage of training.

4. Prepare a course with various types of obstacles on it.

5. Every recruit must practise as a member of every sort of weapon team in the platoon. Introduce this practice, therefore, at the appropriate stage in the men's training with each weapon.

PRELIMINARIES

6. Safety precautions; order "Without drill cartridges—load"; and make the men camouflage themselves.

APPROACH

7. *You will not get over the obstacles unless you are determined to; you know you can; constant practice gives you confidence.*

PRACTICE

8. Practise the men in teams:—

(a) By groups, including manhandling ammunition in bulk.

(b) In sections, including fire and movement.

(c) In competitions, which should be non-tactical. Judge from the enemy point of view, and give marks for speed and care of arms.

CONCLUSION

9. Sum up what has been achieved.

LESSON 13.—INTRODUCTION TO NIGHT WORK

AIM

1. To convince recruits that night training is important, and show them that their eyes work differently in the dark.

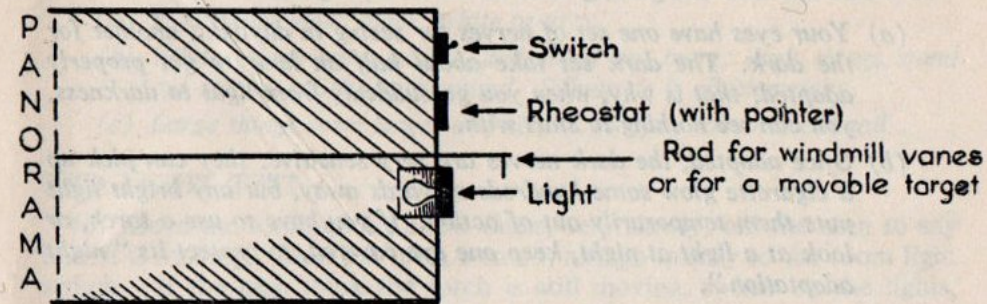
STORES

2. A panorama box (Fig 20). At the back there is a 6-watt bulb, connected in series to a 10-ohm rheostat and a battery, and enclosed except for a pin hole to the front; at the front is the panorama. The light throws silhouettes of the panorama onto a wall 16 or 20 feet away.

3. A torch showing a dim, red light from a quarter-inch hole.

4. A coloured picture about three feet square, with a background of blue sky, white clouds, light and dark fields, and buildings, and in the foreground a tree with branches and twigs against the sky; detail must be easy to see at 20 feet.

Plan View



Suggested Panorama

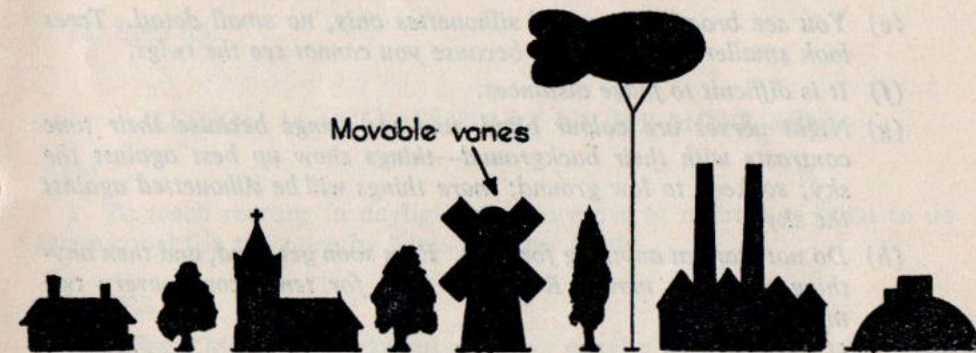


Fig 20.—The panorama box.

NOTES

5. Test all the apparatus. Set the rheostat so that the men will be able to see the panorama when their eyes are adapted to the dark.

6. See that the room can be really well blacked out. Memorize your notes, so that you can lecture in the dark.

PRELIMINARIES

7. Point out the colours and tones on the picture, and the size of the tree. Turn out the lights, except the panorama light.

APPROACH

8. *In the dark you can move without being seen, it is difficult to aim, and neither air reconnaissance nor low level air attack is as effective as in daylight. That is why soldiers work so much at night, as sentries, patrolling, moving by road, laying mines, unloading stores, etc. Most men are not used to working in the dark, and need practice to get used to it, and to gain confidence.*

NIGHT VISION

9. While the men are getting used to the dark, explain:—

- (a) *Your eyes have one set of nerves for seeing in daylight, another for the dark. The dark set take about half an hour to get properly adapted; that is why, when you go suddenly from light to darkness, you can see nothing to start with.*
- (b) *Once adapted, the dark nerves are very sensitive; they can pick up a cigarette glow some hundreds of yards away, but any bright light puts them temporarily out of action. If you have to use a torch, or look at a light at night, keep one eye covered, to protect its "night adaptation".*
- (c) *Eyes have more night nerves at the sides than in the centre, so you see an object more clearly by looking a little to one side of it.*
- (d) *Eyes see slowly; when searching, move your eyes from point to point, dwelling on each point for a few moments.*
- (e) *You see broad shapes and silhouettes only, no small detail. Trees look smaller than they are, because you cannot see the twigs.*
- (f) *It is difficult to judge distances.*
- (g) *Night nerves are colour blind, and see things because their tone contrasts with their background—things show up best against the sky; so keep to low ground; more things will be silhouetted against the sky.*
- (h) *Do not stare at anything for long. Eyes soon get tired, and then anything seems to move. Rest your eyes for ten seconds every two minutes.*

10. Find out whether everyone can now see the panorama silhouettes; do not go on until they can.

PANORAMA TEST

11. Get the men to describe the panorama.

12. Move the sails of the windmill; ask the men if they can see anything moving. Ask if the balloon is moving, and if any of them say it is, tell them.—*If you stare at anything too long, it seems to move, and eventually disappears.*

13. Show them that they see most detail of anything by looking a little away from it in any direction.

14. Make them close and cover one eye; switch on the lights, and send them into the daylight for two or three minutes, with that one eye shut and covered all the time. (Too sudden exposure to a very bright light can damage the eye.) Bring them back into the dark, and get them to look at the panorama with first one eye, then the other, to show them how well an eye can stay "dark adapted" in bright light, if it is closed and covered.

COLOURED PICTURE DEMONSTRATION

15. Explain and demonstrate, using the coloured picture.—*In the dark:—*

- (a) *Everything looks black, white or grey.*
- (b) *White things seem whiter, and stand out more; dark things stand out against a light background. Silhouette is all important.*
- (c) *Large things seem larger and nearer, but you cannot see detail.*

RED LIGHT TEST

16. Move the torch about a few times, very slowly; tell the men to say how it is moving. Then put it on a stand, and go quietly to the room light switch. If the men think the torch is still moving, switch on the lights, and show them that it is not.

CONCLUSION

17. Questions from and to the squad.

18. Sum up.

LESSON 14.—ELEMENTARY NIGHT MOVEMENT

AIM

1. To teach recruits in daylight how to move at night, and what to do when caught in the open by flares or very lights.

STORES

2. Rifles, LMGs, and darkened glasses or goggles, or something with which to blindfold the men.

MOVING AT NIGHT

4. Approach:—

- (a) *At night people hear more than they see, so silence is vital. To move silently at night, you have to go slowly. Rubber soled shoes are a help on hard ground.*
- (b) *A night patrol must not only be silent, it must also stop often to look and listen; halt in cover or shadow if there is any; if there is not, lie down. Lying down you are not likely to be silhouetted against the sky; on the other hand more things will be skylined to you, and you hear better with your ears near the ground or on it. If you hear a suspicious noise when you are moving, it is usually best to freeze for a moment to look and listen, and then slowly and silently take cover or lie down.*

5. Explain and demonstrate the three ways of moving silently at night; make the men practise each way in turn.

6. **The ghost walk.**—Lift your legs high to avoid long grass, and sweep them outwards. Feel gently with your toes for a safe place to put your feet. Make sure one foot is safe before moving the other. Keep your knees a bit bent. Carry your weapon as you would by day.

7. **The cat walk.**—Crawl on hands and knees; search the ground ahead for twigs with your right hand, hold your weapon in your left. Move your knees up to your right hand, then search again.

8. **The kitten crawl.**—Often the only way to get accurate information is to get close to the enemy, which means keeping low and quiet. The leopard crawl is too noisy, but the kitten crawl is very quiet, though it is slow and tiring, and needs a lot of practice. Lie on your stomach, search the ground ahead for twigs with your right hand, lift your body on forearms and toes, press it forward, and lower it to the ground; hold your weapon in your left hand.

9. Practise all three movements again.

ACTION WHEN CAUGHT BY ENEMY LIGHTS

10. **Approach.**—The enemy uses flares and other devices to light up the battlefield; they may catch you in the open, and you must know what to do.

11. Explain and demonstrate:—

(a) If there is a little cover about, it is usually best to take cover or lie down the moment you see the light.

(b) In close country, particularly jungle, it is best to freeze. The enemy is likely to be nearer than in open country, and you make more noise getting down, and attract his attention; if you keep still, the background makes you hard to see. If you know you have been spotted, get to cover quickly.

12. Practice the squad.

CONCLUSION

13. Questions from and to the squad.

14. Sum up.

PRACTICE 6.—MOVEMENT BY NIGHT

AIM

1. To practise men in moving at night and in doing the right thing when caught in the open by enemy flares.

DRESS AND STORES

2. Battle order. Rifles and LMGs, rubber soled shoes, trip flares, very pistols and cartridges, camouflage materials.

NOTES

3. Mark out with white tape a simple flare course, about 250 yards long, across long and short grass, and road or hard ground.

PRELIMINARIES

4. Safety precautions and personal camouflage.

5. Revise night movements, and action when caught in the open by flares (Lesson 14).

PRACTICE

6. Start the men on the flare course, with two in the lead, the rest 10 or 15 yards behind with an instructor. Send up lights from time to time. Change the leaders often enough to give everyone a turn.

CONCLUSION

7. Questions from and to the squad.

8. Sum up the lessons learnt.

PRACTICE 7.—OBSERVATION AT NIGHT

AIM

1. To give men practice at observing at night.

DRESS AND STORES

2. Battle order and rifles. Range card for instructor.

NOTES

3. Start the period just before sunset.

4. Choose an area with undulating ground, trees on a skyline, and all types of going.

5. Enemy party:—

(a) Dress.—Battle order and rifles, steel helmets and berets, rubber soled shoes if required.

(b) Rehearse the "enemy" and the instructors, and make plans for different weather and light.

6. Instructors should have accurate range cards for use in Phase I.

PRELIMINARIES

7. Safety precautions. Put the "enemy" in position against varied backgrounds.

APPROACH

8. Explain the aim.

PHASE I (for combined squads)

9. Give the men a simple tactical picture, and tell them to observe and find the enemy. Point out any prominent objects.
10. As it gets darker, let the men discuss how different everything looks, and get the "enemy" to move about; every now and then make the men take aim, so that they find out how difficult it becomes.
11. Practise judging distance as the light goes.
12. Stress how difficult it is to see things in the distance, except against the sky.

PHASE II (for separate squads)

13. As soon as it is really dark, get one man to walk normally away from the squad, and to count his paces. As soon as no one can see him, stop him, and ask him how many paces he has taken. Then send him another 50 yards or so away, and get him to walk towards the squad. Stop him as soon as anyone sees him; then call him back to the squad, and make him count his paces again.

14. Stress the distance you can see at night, and the way things show up best against the sky. Point out how easy it is to mistake bushes, etc, for men at night, and how important it is, therefore, to study the ground carefully in daylight.

PHASE III (for combined squads)

15. Explain.—*Ears take the place of eyes at night, and you must learn to interpret night noises. If you want to hear better at night:—*

- (a) *Keep quite still, lean forward a bit, half open your mouth, and turn one ear towards any sound.*
- (b) *If you think there are men about, keep one ear close to the ground.*
- (c) *Never cover your ears; it is like blindfolding yourself by day.*

16. Get the enemy to act appropriately, and point out how well a lighted match or cigarette shows up, what a noise a steel helmet or arms can make, how the noise of talking and coughing carries, and how easy it is to underestimate distances, and over-estimate numbers.

PHASE IV (for combined squads)

17. Get the enemy, camouflaged and wearing berets and, if necessary, rubber soled shoes, to try to approach unseen from a new direction. Warn the men to expect them.

18. Every time a man says he sees an enemy, order "Stop"; send him out with an NCO to investigate, and to bring the enemy in if he is there. Start the enemy off again, and go on until they have all been spotted.

CONCLUSION

19. Questions from and to the squads.
20. Sum up.

PRACTICE 8.—IDENTIFYING SOUNDS AT NIGHT

AIM

1. To give men practice at identifying noises at night.

STORES

2. According to the list of noises chosen.

NOTES

3. Use ground that the men do not know.
4. Rehearse the "enemy", and arrange how you will control them.
5. If necessary, use half the squad as enemy for half the time, the rest for the other half of the time.
6. The "enemy" must be out of sight of the observers.

APPROACH

7. Explain the aim of the practice.

PRACTICE

8. Signal to the enemy to make each noise when you are ready for it; then ask the observers what the noise was, how far away, and in what direction.

9. To make noises, the enemy can do many things; for example, dig, revet, knock in pickets, change magazines, open and close a rifle breech, load and unload various weapons, post sentries, talk and whisper, blow their noses, cough, crack twigs, knock a rifle against a steel helmet, cut wire, walk over all sorts of ground, fill sandbags, load a truck with jerricans, etc, and finally, after a period of silence, creep up on the observers.

CONCLUSION

10. Questions from and to the squad.
11. Sum up the lessons learnt.

LESSON 15.—DUTIES OF A SENTRY AT NIGHT

AIM

1. To teach a sentry's duties at night.

STORES

2. Rifles, blank ammunition, camouflage materials.

NOTES

3. Lay out a section post in front of the spectator's stand, and rehearse a demonstration party.

APPROACH

4. *Every one of you will be a night sentry at some time, and in battle your comrades' lives will depend on how well you know your duties, and how conscientiously you perform them.*

DUTIES

5. Explain.—*Sentries are always posted in pairs at night; these are the things they must know:—*

(a) All sentries:—

- (i) *What ground to watch.*
- (ii) *What to do if anyone approaches their posts.*
- (iii) *The password.*

(b) Sentries in forward areas:—

- (i) *The direction of the enemy.*
- (ii) *Where their own neighbouring posts are.*
- (iii) *The names of landmarks in front of them.*
- (iv) *About patrols that may come in through or anywhere near their posts.*

- (c) *The signal for them to fire defensive fire, if, for instance, they are sentries on a LMG laid on a fixed line.*

CHALLENGING

6. Explain.—*As a night sentry your most difficult job is challenging people that approach your post. The correct procedure is:—*

Action by sentry

- (a) *Say "Halt—hands up" just loud enough to be heard.*
- (b) *Say "Advance", or, if more than one person has approached, "Advance, one".*
- (c) *Ask for the password, or identify the person in some other way.*
- (d) *Go through the same procedure for each of the approaching party.*

Action by people challenged

- Stand still, and put up their hands.*
- One man moves forward to the sentry, still with his hands up.*
- Gives the password, or answers any questions.*

DEMONSTRATION

7. Give a simple tactical picture, and stage a series of demonstrations, with commentaries, to show how sentries should not, and should, behave.

8. First demonstration (wrong)

- (a) A friendly patrol approaches the post. Without challenging, the sentry opens fire and wounds a man; the patrol goes to ground.
- (b) Question the squad, and explain.—*Even if the patrol had been enemy, the sentry would have been wrong; he would have given his position away unnecessarily.*

9. Second demonstration (right)

The same friendly patrol approaches. The sentry has a string with the ends tied to his own and the section commander's wrists. As soon as he sees the patrol, he tugs the string to wake the section commander, who rouses the section in the same sort of way. The section stands to, and sentries and section cover the patrol; one sentry challenges.

10. Third demonstration (wrong)

- (a) An enemy patrol approaches the post. As soon as the sentry sees them, he shouts a challenge; the enemy get down, crawl to a position of observation, and watch the post.
- (b) Question the squad, and explain.—*The sentry challenged too loud, and at too long range, and simply gave away the position of the post.*

11. Fourth demonstration (wrong)

- (a) The same enemy approach. The sentry challenges quietly at a sensible range, but does not wake the section commander; the enemy rush the post, and mop it up.
- (b) Question the squad, and explain the sentry's mistake.

12. Fifth demonstration (right)

The same enemy approach. As soon as he sees them, the sentry rouses the section commander, who stands the section to. The sentry challenges quietly at a sensible range. The enemy turn and run; the section opens fire, and kills or wounds them all.

PRACTICE

13. Give the squad practice at challenging.

CONCLUSION

14. Question the squad on the things sentries must know.

15. Sum up:—

- (a) *Always challenge just loud enough to be heard.*
- (b) *If in doubt, give the alarm quietly before you challenge.*
- (c) *Do not do anything to enable the enemy to find out where you are, and then get away to report it.*
- (d) *Do not shoot unless you must, and then not until you are sure of killing.*

PRACTICE 9.—OBSERVATION, MOVEMENT AND SENTRIES' DUTIES AT NIGHT

AIM

1. To give men practice at moving, observing, and acting as sentries at night.

DRESS AND STORES

2. Battle order. Rifles and machine carbines, camouflage materials.

NOTES

3. Choose ground with a variety of cover, background and going, and with some place where, if the stalkers stand up, the sentries can see them against the sky.

PRELIMINARIES (DAYLIGHT)

4. Safety precautions.
5. Divide the men into two teams, and each team into pairs.

PRACTICE

6. Post the pairs of one team as double sentries; and get the pairs of the other team to stalk their posts.
7. Change the teams over at half time.

CONCLUSION

8. Questions from and to the squad.
9. Sum up progress made and lessons learnt.

LESSON 16.—SELECTING LINES OF ADVANCE

AIM

1. To teach recruits how to choose a line of advance.

DRESS AND STORES

2. Clean fatigue (with notebooks and pencils). Blackboard and chalk, diagrams of ways of finding and keeping direction, cloth model.

NOTES

3. Choose ground with room to disperse squads widely, on which you can find objectives and starting points up to 800 yards apart, with a choice of lines of advance.

4. Reconnoitre the ground, and decide on the best lines of advance, positions of observation and fire positions.

5. Start with courses about 200 yards long, and, as the men improve, gradually lengthen them to 800 yards.

6. Introduce the practice part of the period frequently into the training programme (paras 11—17).

PRELIMINARIES

7. Organize the men into groups of three.

8. Revise the qualities of a good fire position (*See Infantry Training, Volume 1, Pamphlet No. 3, 1955, (WO Code No. 8903), Lesson 10.**)

APPROACH

9. *Before you move from one point to another in battle, you must choose the route which will serve your purpose best.*

CHOOSING A LINE OF ADVANCE

10. Explain by means of diagrams, cloth models or on the ground:—
 - (a) *When you have to choose a route, you must be able to look at the ground, and quickly make a sensible decision; this needs a lot of practice on all sorts of ground. The things to decide, subject to any order you have had, are:—*
 - (i) *Where to make for.*
 - (ii) *The best route there.*
 - (iii) *When to run, walk or crawl.*
 - (b) *An ideal line of advance is one on which, all the way:—*
 - (i) *There are places from which to observe without being seen.*
 - (ii) *There are good fire positions.*
 - (iii) *You can move without the enemy seeing you.*
 - (iv) *You have cover from enemy fire.*
 - (v) *There are no obstacles to movement—open ground, bogs etc.*

* To be published.

Unfortunately (iii) and (iv), and (ii) seldom go together; low ground is best for cover, high ground for observation and shooting. You must make your choice according to the circumstances.

- (c) Move from one position of observation to another, and plan each of these bounds in advance.
- (d) The most difficult thing is to keep direction; these will help:—
 - (i) Map, air photographs and compass.
 - (ii) Distant landmarks; check them after each bound.
 - (iii) The position of the sun, and the direction of the wind.

PRACTICE 1

- 11. Divide the men into small groups.
- 12. Point out on the ground the general direction of the enemy, the objective to make for, the reconnaissance area, and the limits within which they must plan their route.
- 13. Give the men a time limit within which to choose their line of advance, and plan the first bound in detail, without moving out of the reconnaissance area.
- 14. At the end of the time, discuss the various group plans with the men.
- 15. Choose the plan likely to bring out most lessons, and make each group in turn follow the route. At the end of each bound, discuss it from the enemy's point of view, and see whether the route chosen was really the best.

PRACTICE 2

- 16. Appoint a few of the men to be observers, and give them positions from which to watch the rest of the squad. Point out to the rest the objective, the places where enemy observers are likely to be, and the reconnaissance area. Set time limits for the reconnaissance, and for the move to the objective.

CONCLUSION

- 17. Get observers and stalkers together, and bring out by discussion the lessons you want to teach.
- 18. Sum up; emphasize how important it is to plan before you move.

LESSON 17.—STALKING

AIM

- 1. To teach recruits how to stalk.

DRESS AND STORES

- 2. Battle order and rifles. Drill grenades, camouflage material, blank ammunition.

NOTES

- 3. Choose ground new to the men, with room to disperse squads widely and allow stalks of about 200 yards; remember that you are out to test the men's ability to choose a route, use cover, choose a fire position, and keep direction.

- 4. See that each man gets a turn at each sort of duty.

PRELIMINARIES

- 5. Safety precautions and personal camouflage.
- 6. Question the men about choosing a line of advance.

APPROACH

- 7. When you stalk an enemy, you need to use all the knowledge and skill that you have learnt in weapon training and fieldcraft lessons.

PLANNING A STALK

- 8. Explain.—The first thing to do is make a plan:—
 - (a) Find the enemy by observation, and memorize his position.
 - (b) Choose your objective—the position from which you will kill the enemy—and your route, taking into consideration:—
 - (i) Cover from fire and view, and dead ground.
 - (ii) Bounds.
 - (iii) Obstacles.
 - (iv) Other enemy positions, known or probable.
 - (v) Possible alternative routes, in case of need.
 - (vi) How to keep direction.

- 9. Question the squad.

STALKING

- 10. Explain.—Outwit the enemy by guile and cunning. Much depends on the circumstances, and how you react to an emergency, but you must always:—

- (a) Be alert; never relax.
- (b) Observe carefully at the end of each bound.
- (c) Think about possible fire positions, in case you are surprised.
- (d) Take advantage of noises, aircraft, gunfire, etc.
- (e) Try not to disturb animals or birds.
- (f) If you must take risks, take them early rather than late.
- (g) Remember that, if you finish up by missing with your shot, at the very best your time and effort will have been wasted.

- 11. Question the squad.

DEMONSTRATION

12. Get a NCO to demonstrate a stalk. Arrange for the stalk and your commentary to bring out the lessons of paras 8 and 10.

PRACTICE

13. Divide the men into threes, a stalker, a victim and a recorder.

Explain the three men's tasks:—

- (a) *The stalker—to make a plan, stalk his victim, and kill him either with a short range rifle shot or with a grenade. For safety's sake, if he uses a grenade, he must shout "Ready to throw" before he throws it.*
- (b) *The victim—to watch, and fire a blank round, whenever he sees the stalker; and to tell the recorder how well he saw him, how accurately he was able to shoot, etc.*
- (c) *The recorder—to watch the stalker, and record the victim's reports.*

14. Put the victims and observers in fire positions, and tell the stalkers roughly where they are. Show the stalkers their start lines and reconnaissance areas; explain the rules to them, and start them off.

15. Hold a short discussion at the end of each stalk.

CONCLUSION

- 16. Questions from and to the squad.
- 17. Sum up.

LESSON 18.—KEEPING DIRECTION AT NIGHT

AIM

- 1. To teach recruits how to keep direction at night.

DRESS AND STORES

- 2. Battle order and weapons. Camouflage equipment, diagram of the Great Bear and North Star (Fig 21).

NOTES

- 3. Choose a cross country course about 500 yards long, clear of roads and buildings, with an objective that cannot be seen at all until the last 100 yards, but is then unmistakable.

PRELIMINARIES

- 4. Safety precautions and personal camouflage.
- 5. Revise ways of keeping direction by day (Lesson 16).

APPROACH

- 6. It is extremely easy to lose direction at night, unless you know how to go about it.

METHODS OF KEEPING DIRECTION (to be taught before dark)

- 7. Explain and demonstrate.—*There are various ways of keeping direction at night:—*

- (a) *Compass.*
- (b) *Landmarks.*
- (c) *The moon, but it moves across the sky.*
- (d) *Stars, which also move; but the pointers of the great Bear point to the North Star, which is always almost directly North.*
- (e) *The wind.*

- 8. Question the squad.

PRACTICE (after dark)

- 9. Send one NCO to the objective, and another to the start point; keep another to practise waiting man in the duties of a sentry.

- 10. Send the men one at a time to the start point, where the NCO tells them the direction of the objective and what it looks like, and the password, and sets them off.

- 11. As the men reach the objective, the NCO there posts them as sentries.

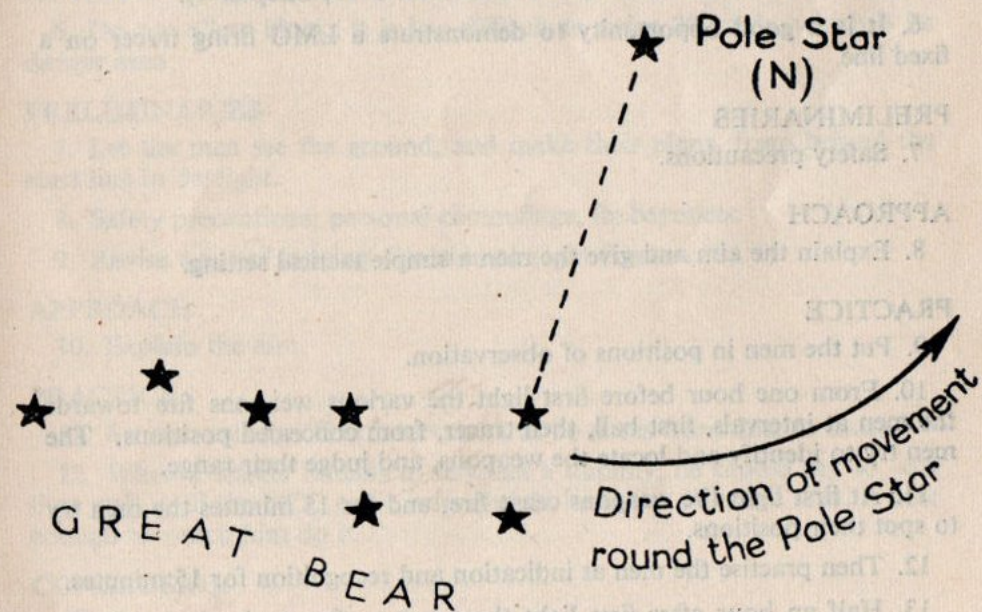


Fig 21.—The Great Bear and North Star.

CONCLUSION

12. Questions from and to the squad.
13. Sum up lessons learnt.

PRACTICE 10.—LOCATING THE ENEMY AT NIGHT BY HIS FIRE**AIM**

1. To practise men in locating the enemy by his fire, and in judging distance, at night.

STORES

2. Weapons and ammunition.

NOTES

3. The practice requires a field firing area. It lasts from one hour before to one hour after first light, but it can well be the culmination of a night's training in weapon handling, sentry duties, movement, mess tin cooking, etc.
4. Several squads can take part, each under its own instructor.
5. An officer must supervise the firing; he must work out a detailed programme, and rehearse it in daylight with all instructors present. He must obey general and local safety regulations (*see* Infantry Training, Volume III, Pamphlet No. 33, WO Code No. 8713, Chapter 4).
6. It is a good opportunity to demonstrate a LMG firing tracer on a fixed line.

PRELIMINARIES

7. Safety precautions.

APPROACH

8. Explain the aim and give the men a simple tactical setting.

PRACTICE

9. Put the men in positions of observation.
10. From one hour before first light the various weapons fire towards the men at intervals, first ball, then tracer, from concealed positions. The men try to identify and locate the weapons, and judge their range.
11. At first light the weapons cease fire, and for 15 minutes the men try to spot their positions.
12. Then practise the men at indication and recognition for 15 minutes.
13. Half an hour after first light the weapons fire again, and then the enemy move about and stand up, one by one.

14. Discuss with the men how their estimates of positions and range compare with the facts revealed by daylight.

CONCLUSION

15. Questions from and to the squad.
16. Sum up the lessons learnt.

PRACTICE 11.—STALKING AT NIGHT**AIM**

1. To practise stalking at night.

DRESS AND STORES

2. Battle order, rifles and bayonets. Bayonet dummies, camouflage materials, flares, very pistols and cartridges.

NOTES

3. Arrangements can be much the same as by day (*see* Lesson 17), but the course should be shorter and simpler. It may help to mark the limits of each squad's sector with lamps at night.
4. The practice makes a good competition, with, say, five marks each for movement and silence, action when flares go up, and the use of the bayonet, and ten marks for route and direction keeping.
5. To add realism, put out bayonet dummies as enemy sentries, but not too close to the victim or recorder.
6. Do not allow blank; it is too difficult to judge 20 yards, which is its danger area.

PRELIMINARIES

7. Let the men see the ground, and make their plans, from behind the start line in daylight.
8. Safety precautions, personal camouflage, fix bayonets.
9. Revise ways of keeping direction at night (Lesson 18).

APPROACH

10. Explain the aim.

PRACTICE

11. Set the stalkers off at intervals. Put up flares from time to time.
12. When a stalker intends to bayonet a dummy, he should say *so*, and then wait until the NCO critic, who should be in the objective area, is near enough to watch him do it.

CONCLUSION

13. Questions from and to the squad.
14. Sum up results and lessons learnt.

PRACTICE 12.—FIELD CRAFT

(Not to be used until the men have fired transitional practices and been introduced to section handling.)

AIM

1. To give men practice in using cover, and acting sensibly when fired at.

DRESS AND STORES

2. Battle order and section weapons. Figure 12, 13 and 14 targets, camouflage equipment, ball and blank ammunition.

NOTES

3. Ball and blank ammunition must NOT get mixed; this needs strict precautions.
4. Instructors should command both sections, and be responsible for safety.
5. Conduct the practice on a field firing area.

PRELIMINARIES

6. Safety precautions, personal camouflage.
7. Divide the men into two sections, attackers and defenders; appoint LMG Nos. 1 and 2.

APPROACH

8. *One test of a fire position is how effective enemy fire is against it; this practice will show you how well you choose.*

PRACTICE

9. The two sections take post about 500 yards apart and load with blank.
10. The attackers advance, the defenders observe.
11. The defenders open rapid fire when the attackers are less than 150 yards away. As soon as the attackers are in fire positions and firing back, order "Stop". An instructor goes to each attacker in turn, makes certain that he really could use his weapon from his fire position, puts there whatever target most accurately represents the view he was presenting to the defenders, and writes his name on it.
12. The attackers close, and pass through the defenders.
13. Collect all blank, and give out ball ammunition.
14. The defenders (or the attackers from the defenders' old positions) engage the targets. Everyone inspects the targets afterwards.

15. Discuss the lessons learnt.

16. Collect all ball, and issue blank. Change the sections round, and repeat the practice.

CONCLUSION

17. Questions from and to the squad.
18. Sum up.

CHAPTER 2.—EXTRA INFORMATION FOR INSTRUCTORS

INTRODUCTION

This chapter contains extra information for instructors, to help them to understand the subject more thoroughly, and make training more varied. See also Visual Training, Pamphlet No. 1, Observation and Concealment, 1946, (WO Code No. 7019).

SECTION 1.—PRACTICE PERIODS

1. All training must be progressive; unnecessary repetition bores people. A recruit learns skills and facts in the lessons, and he should be taught them once only during his service; he then needs much time and practice to speed up his actions, and get the facts firmly fixed in his mind.
2. During practice periods it may be obvious that the men have failed to grasp a particular skill or fact, and you may have to teach them part of a lesson again.
3. The practices in this pamphlet are a guide to the best way of exercising recruits, but you must watch their weak points, and plan practices accordingly.
4. Spot and check faults immediately, or recruits will go on making mistakes, and make no progress.
5. Put a practice into the programme whenever there is time, but keep varying the method. Use the fieldcraft games (Section 7), and your own variations, to keep men interested.

SECTION 2.—FIRE CONTROL

Definitions

1. **Fire unit.**—Any number of men firing under the command of one man; the one man is the fire unit commander; for example, a section and the section commander.

2. **Fire direction orders.** Orders that a fire unit commander receives from his superior; they may include key ranges, special orders to withhold fire, when to open fire, at what targets, and at what rates, etc.

3. **Fire control orders.**—Orders that the fire unit commander gives to control and direct the fire of his men.

4. **Arc of fire.**—The ground for which a fire unit is responsible, and in which it engages targets.

5. **Axis of arc of fire.**—The approximate centre of the arc.

6. **Field of fire.**—The ground on which a man or a fire unit can fire effectively.

Fire control orders

7. Unless section commanders apply their men's fire effectively in battle, the men's skill with their weapons is wasted. All NCOs must know how to give good fire control orders; the most important thing is to indicate the target so clearly that the men can easily recognize it. The emphasis must be on control and surprise.

8. Before giving a fire control order, ask yourself:—

- (a) Is the target near enough, clear enough, and vulnerable enough to justify opening fire? Would it be better to wait for a more vulnerable target, or more complete surprise?
- (b) What are the best weapons to use, LMG, or rifles, or both together?
- (c) Should the fire be rapid or normal, single rounds or bursts? Rapid fire is only justified when it makes surprise more effective, when a target is particularly vulnerable, or to cover movement in the final stages of an assault.

9. Always give a fire control order:—

- C — Clearly, calmly and concisely.
- L — Loud enough for the men to hear it above the noise of battle.
- A — As an order.
- P — With pauses. For example, pause after ordering the range, to give the men time to set their sights, and get into the position of readiness.

10. Types of fire control order (See Lesson 11):—

- (a) Never give an individual fire control order unless it is impracticable for you to control the fire yourself.
- (b) If you have to engage a large target, direct fire at one point on it at a time.

11. Practice:—

- (a) To give NCOs practice at deciding what type of order to give, lay on an exercise with a controlled, well rehearsed "enemy".
- (b) Discuss each order, particularly if fire would not have been really effective, under the headings:—
 - (i) Was the sequence correct?
 - (ii) Was it the right sort of order for the target?
 - (iii) Was the range about right?
 - (iv) Was the indication accurate, clear and concise?
 - (v) Were unnecessary aids used in the indication?
 - (vi) Did the rate of fire meet the situation?
 - (vii) Did the firers think about wind?

Remember that an order cannot be a good one unless it produces effective fire.

SECTION 3.—USE OF BINOCULARS AND DEGREES

Degrees

1. Look through a pair of Service binoculars, and you will see some thin black lines, known as the graticules. The long vertical lines are one degree apart, and the short ones are half way between them.

2. If an average man stretches out his left arm, his left hand will give him roughly the degrees shown in Fig 22.

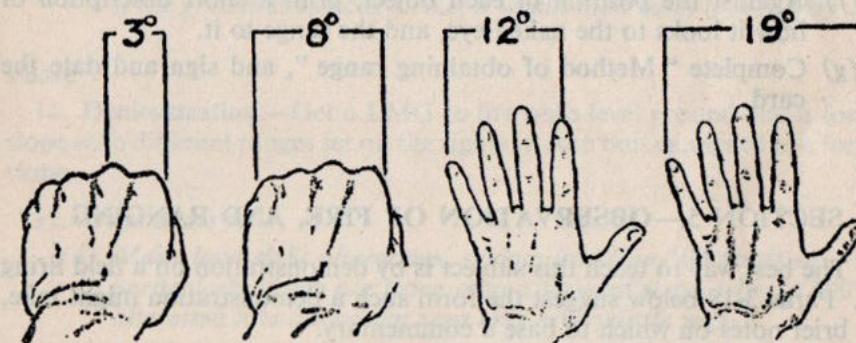


Fig 22.—The hand used for measuring degrees.

Binoculars

3. Binoculars magnify between six and eight times; they have a wide field of view, and are handy and quick to use. They are most useful at night.

4. Never strip binoculars. Keep the eye pieces screwed down when not in use.

5. To focus them, either use the central screw, or adjust the eyepieces separately.

SECTION 4.—RANGE CARDS

1. Record ranges on a range card whenever you can; you will find it most useful in battle.

2. Infantry Training, Volume IV, Infantry Section Leading and Platoon Tactics, 1950, (WO Code No. 8593), Fig 8 is an example of a completed range card. On the blank card, the five equidistant circles have no ranges marked on them; use them for any series of ranges up to 1,000 yards.

3. A section normally has an arc of fire; but you must record ranges in every direction, so that you are really prepared to conduct all round defence; hence the design of the card.

4. To make out a range card:—

- (a) Describe accurately the point from which you are making it out.
- (b) Put in the range that each circle is to represent.
- (c) Choose two unmistakable objects, one to the front and one, if possible, behind you, and draw a thick setting ray to each.
- (d) Decide on the objects that you want to record the range to; include positions that the enemy may occupy, and obstacles, gaps in hedgerows, etc, near which he is likely to pass.
- (e) Set the card by the setting rays, and draw in rays in the direction of all the other objects.
- (f) Against the position of each object, print a short description of how it looks to the naked eye, and the range to it.
- (g) Complete "Method of obtaining range", and sign and date the card.

SECTION 5.—OBSERVATION OF FIRE, AND RANGING

1. The best way to teach this subject is by demonstration on a field firing area. Paras 3-18 below suggest the form such a demonstration might take, with brief notes on which to base a commentary.

2. Everyone should attend an elementary lecture on the theory of small arms fire before this demonstration is staged.

Phase I

3. **Demonstration.**—Use a LMG with its sights set low; the bullets will strike short; adjust the sights until they hit the target.

4. **Commentary.**—*Always observe your fire; if you judge the range badly, or if your weapon is wrongly sighted, it is the quickest and surest way to correct both errors, and get your bullets to hit the target.*

Phase II

5. **Demonstration.**—First a LMG, and then a rifle group, fires at a ground target.

6. **Commentary.**—*It is far easier to observe the fire of a LMG, because of the number of bullets that strike the ground in quick succession, than of riflemen; so it is normally better to use LMG fire as the basis for applying a section's fire to a target.*

Phase III

7. **Demonstration.**—Get a LMG to fire onto various sorts of ground.

8. **Commentary.**—*It is easier to observe fire on dry plough, sand or short grassland, or on water, than on wet ground, long grass or standing corn.*

Phase IV

9. **Demonstration.**—Get a LMG to fire onto a ground target.

10. **Commentary:**—

- (a) *The aim is to apply the centre of the beaten zone to the target. If you can see shots strike both short of the target and beyond it, you have achieved your aim.*
- (b) *There are always a few wide shots round the edge of the beaten zone. Never take a single bullet strike as the centre of the beaten zone; if the ground shows one strike, it would show more if they were there.*

Phase V

11. **Demonstration.**—Get a LMG to fire onto level ground and a forward slope with different ranges set on the sights; a stop butt can serve as a forward slope.

12. **Commentary:**—

- (a) *Make bold sight alterations, seldom less than 100 yards at a time; particularly if you are firing onto a forward slope, when a 100 yard alteration lifts the beaten zone only a very little way.*
- (b) *The beaten zone is shorter on a forward slope than on level ground; you must therefore apply it more accurately to the target.*

Phase VI

13. **Demonstration.**—Get a LMG to fire at a target with dead ground immediately behind it, so that no bullet strikes can be seen; then reduce the range boldly, observe the strikes well short of the target, and correct onto the target from there.

14. **Commentary.**—*If you cannot see any strikes at all, lower your sights 200 or 300 yards, and watch for strikes short of the target; then move the beaten zone onto the target by observation or, failing that, by estimation.*

Phase VII

15. Demonstration:—

- (a) Get a LMG to fire tracer at a group of Figure 10 or 11 targets on level ground, with the beaten zone falling beyond the target. Put the spectators to a flank, roughly level with the target.
- (b) If no tracer is available, arrange a series of targets one behind the other, so that the bullet holes show the trajectory.

16. **Commentary.**—On level ground a target may be short of the beaten zone, but in the dangerous zone. If you are firing at all targets, like walking men, on fairly level ground, at not more than 600 yards, it is usually best to put your beaten zone a bit beyond them. Fire unit commanders seldom remember this.

Phase VIII

17. **Demonstration.**—Get a LMG to range onto a convenient point. Then get markers in pits to put up fleeting targets in the area.

18. **Commentary.**—By ranging we mean finding the exact range to a likely target, such as a gap in a hedgerow, by shooting at it before there are any enemy there. When a target does appear, you will be able to hit it quickly, but you may lose surprise; and you must decide whether it is worth while.

SECTION 6.—DIRECTION FINDING

1. Lesson 18 describes how to find North from the Great Bear and North Star.

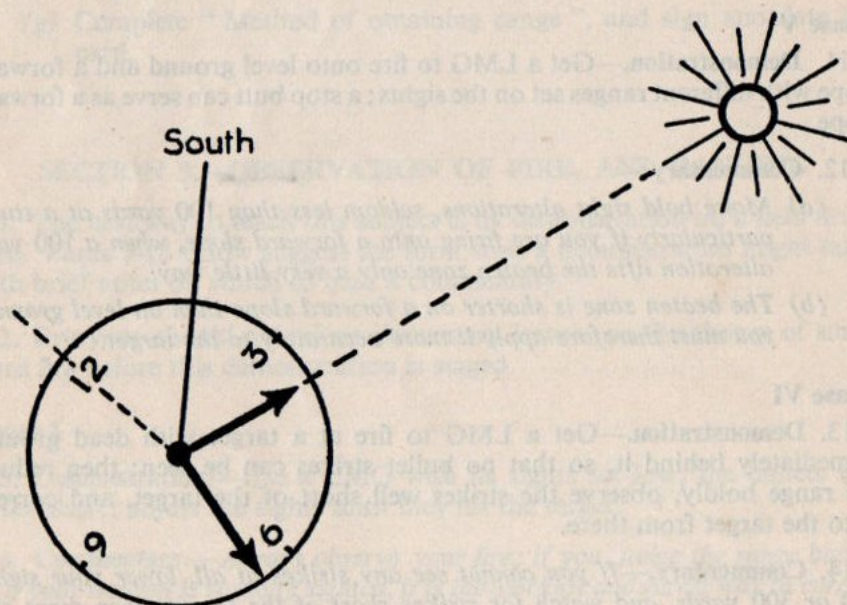


Fig 23.—Finding South from the sun and a watch.

2. To find south in daylight (See Fig 23):—

- (a) Make sure that your watch is set to the correct zone mean time, not a special summer time.
- (b) Point the small (hour) hand at the sun; South lies half way between the small hand and twelve o'clock on the watch face.
- (c) To avoid confusing North and South, think whether the sun is to Northward or Southward; it is always Southward anywhere North of the Tropic of Capricorn, to Northward South of the Tropic of Cancer, and varies at different times of year between the tropics.

SECTION 7.—FIELD CRAFT GAMES AND EXERCISES

1. Fieldcraft games and exercises are most useful; not only do they exercise trained or half trained men in an interesting way, but also a few instructors can handle a lot of men.

2. This section suggests a number of games and exercises, and you can devise many more of the same sort. After any of them, hold a short discussion to bring out the lessons (See Section 8).

Exercises and games for daytime

3. **Keeping direction.**—Choose a start point and two objectives, in the form of a triangle. Send the men off one by one to the first objective, where another instructor sends them on again to the second objective; there a third instructor tells them to find their way back to the starting point.

4. Observing:—

- (a) Get a rehearsed party of men to move about the area of observation creating realistic incidents, approaching from different directions, firing various weapons, digging, observing, etc.
- (b) Include battle inoculation, with charges to simulate mortar and artillery fire, if you are on a field firing area.
- (c) NCO supervisors should have a time chart of incidents; they can then get men to indicate targets, and check their interpretations of what they have seen.
- (d) To test the men's powers of concentration, have a period in the middle when nothing happens.
- (e) The men should record what they see in notebooks, which you can then use as the basis of a competition. Question the men at suitable intervals, and give them credit for sound deduction.

5. The enemy's point of view:—

- (a) Show film B/C 987, "What does the enemy see? (ground view)".
- (b) Choose a friendly and an enemy post about 300 yards apart, and in view of each other. Put demonstration men or dummies in the friendly post.

- (c) Bring your men up behind the friendly post, and from there get each of them to study its background, etc, and decide how much of it the enemy could see, and whether the enemy would find it easy to give a fire control order onto it.
 - (d) Take the men across to the enemy post to see how well they worked out the answer.
6. **Movement.**—Choose a triangular or four sided course over ground with all sorts of cover, with the corners about 100 yards apart, and an instructor and squad at each corner. Each squad sends off individuals or pairs in both directions, at intervals, to stalk round the course. Men not stalking can watch and criticize. You need a number of umpires round the course to assess the results of each meeting, and keep the score.

7. Spotting and freezing:—

- (a) Divide the men into two teams of up to 20, to act as "spotters" and "freezers". The spotters watch from high ground; the freezers start 250 yards away, and try to reach the finishing line, about 50 yards in front of the spotters, without being seen.
- (b) Blow a long whistle blast to show the beginning and end of effective covering fire coming down on the spotters; blow two short blasts a few seconds after the second long one, to show that the spotters have their heads up again. Make the spotters turn their backs on the freezers each time between the first long blast and the two short ones; on the two short blasts, let them turn round and try to spot the freezers.
- (c) Between the two long blasts the freezers must run forward; between the second long blast and the two short ones, they get to cover; between the two short blasts and the next long one they may not move. Any man seen by the spotters is "dead".
- (d) Both teams should act as both spotters and freezers; the team that gets the most men over the finishing line "alive" wins.

8. Hanger crawl:—

- (a) Choose ground with plenty of low cover, but such that umpires can still see what is going on. Each game requires a strip of ground about 200 yards long, two teams of three and an umpire. It may be possible to run several games at once. Umpiring is good practice for potential NCOs.
- (b) Put something to represent an air drop of food in the middle of the strip of ground; if necessary, mark it with a sheet on a bush, representing the parachute.
- (c) Show the teams the ground and the boundaries, and arm each man with a clod of earth to represent a grenade. Start the teams off at opposite ends of the ground with orders that anyone who fails to reach the food in 15 minutes dies of starvation. A man can also kill an opponent by throwing a "grenade" to land within ten feet of him.

9. Concealment:—

- (a) Divide the men into two teams of hiders and seekers. Make the seekers turn their backs, and send the hiders about 150 yards away from them with an instructor. Blow a whistle to make the hiders stop and hide where they can watch the seekers. The instructors then make sure that the hiders can see the seekers. After a pause tell the seekers to turn round and try to spot the hiders inside two minutes.
- (b) Discuss results, point out mistakes, and suggest how the men could do better. Change the teams round, and repeat the exercise.

Exercises and games for night time

10. Identifying sounds:—

- (a) Divide the men into two teams. Put one team in a listening post, marked by tapes, about 20 yards from a small wood, and forbid them to leave the post. Give the other team a list of things to do and where to do them, and the necessary stores. The first team tries to identify the sounds.
- (b) Here is a suggested list from which to choose a 30 minute programme for the second team; arrive at the far side of the wood in a truck, unload the truck, start to dig a slit trench, burn some paper, lay mine tapes, rescue a "wounded" dummy from near the listening post, put up a bivouac, fill up the truck with gasoline from a jerrican, reload the truck and move off.
- (c) Discuss results, change the teams over, and repeat the exercise with a different programme of sounds.

11. **Obstacle course.**—Prepare an obstacle course, with some wire and trip flares; crawling should be necessary over parts of it; if it is on a field firing area, it is a good idea to include battle inoculation. Sentries along the course, to watch and criticize, are useful. The men prepare for battle, and go over the course in pairs, five minutes apart.

12. **Lamp stalk.**—Put two lamps 200-300 yards apart, each one visible from the other. Divide the men into two teams (not more than 12 in each). One team, moving individually, try to reach the second lamp from the first: the other team lie up and try to capture them: they are not allowed within 50 yards of the second lamp.

Vary numbers and distances according to the ground and the darkness of the night. Men usually take from 30 to 60 minutes to reach the second lamp successfully.

13. **Tank hunt.**—Choose not too dark a night, and let the men see air photographs, if possible, and study the ground with binoculars from the start point by day. Put out torch "sidelights" to represent an enemy tank. Send the men off to hunt the tank in pairs with drill 75 grenades, or with section or platoon anti-tank weapons.

14. Attack and defence stalk:—

- (a) Divide the men into two teams, and give them each a well defined area about 200 yards square, such as a wood or field, with a lamp and a neutral NCO somewhere in it. Establish a prisoners' cage under another neutral NCO just outside each area. The areas should be about 500 yards apart.
- (b) Divide each team into attackers and defenders. The attackers work singly, and try to get into their opponents' area, and report to the NCO; he gives them a token with their name on it, which they must hand in to their own prisoners' cage, before they can try again. The defenders observe or patrol in pairs, and try to capture the attackers, and take them to their prisoners' cage. No one may enter his own area. Prisoners should be sent back by a "safe" route to try again, after their names have been taken.
- (c) After two hours fire a very light to end the exercise. Count the tokens and the prisoners in the two cages. A team scores one point for each token, and one for each prisoner they have captured.

SECTION 8.—DISCUSSIONS AFTER EXERCISES

1. Men learn by making mistakes and watching others make mistakes; much of the value of any exercise lies in the conference or discussion that should take place as soon as possible after the end of it.

2. These hints apply to any small exercise of the kind that this pamphlet describes.

3. Preparation for the discussion:—

- (a) Be clear about the aim of the exercise.
- (b) Be clear about the main lessons you want to teach; these should be obvious from the aim and the mistakes that have been made.
- (c) Be clear exactly what happened during the exercise; this often means questioning both sides.

4. The discussion:—

- (a) Get the individual or the leader to say what orders he received, what he did, and why he did it.
- (b) Get the critics to say what they noticed, good and bad.
- (c) Ask for any other contributions.
- (d) Sum up the main factors, the courses open, the suggested plan, and the lessons to be learnt.

SECTION 9.—NOTES ON TRAINING FILM "DANGEROUS JOURNEY"

1. The film tells the story of two private soldiers successfully carrying out a difficult and dangerous task. It is worth showing to men at the beginning of their training, to make them realize the standard to aim at, and why they have to learn all the things they are taught; and again at the end of their training to remind them of the high standard of battle-craft and determination required of infantry soldiers.

2. At the end of the film ask questions to bring out the lessons:—

(a) Resourcefulness and self reliance:—

- (i) How the men used the officer's sten, binoculars and air photograph.
- (ii) How they hid the officer's body and the reconnaissance boat.
- (iii) How they picked up the chocolate paper, so as not to give themselves away by leaving a trail of paper.
- (iv) How they used water sterilizing tablets.
- (v) How they decided to keep away from the path of the enemy patrol after leaving the ditch.
- (vi) How they made deductions about the enemy, and decided to lay an ambush.
- (vii) How they used a field dressing.

(b) Observation:—

- (i) How carefully they approached their OP.
- (ii) How little they moved about in the OP.
- (iii) How they used the binoculars.
- (iv) How they made sound deductions about the ground when near the enemy, and therefore chose the best possible OP.

(c) Preparation and personal camouflage:—

- (i) How the patrol was briefed and inspected.
- (ii) How the men used camouflage cream to make their faces and hands blend with the landscape.
- (iii) How they stuck foliage in their cap comforters.
- (iv) How they looked after their weapons, cleaning them, for instance, in the second OP.

(d) Cover from view and fire:—

- (i) How they concealed themselves in the OP and the ambush position.
- (ii) How they made use of woods.
- (iii) How they used the hedge and ditch, and crawled up the drain, just after leaving the first OP.
- (iv) How they realized that it would be difficult to get into the enemy position because the cover was poor.
- (v) How difficult it was to see detail while the enemy position was in shadow, and how much easier it was when it was in the sun.
- (vi) How they used a large tree trunk in the second OP.

- (e) Selection of lines of advance.—How they discussed the problem in the second OP, and chose their route, because:—
 (i) It offered better cover.
 (ii) There was likely to be a good OP higher up the slope.
 (iii) There was less chance of a clash with the enemy.
- (f) Movement and the carrying of weapons:—
 (i) How they moved by day to suit the cover, keeping close together in thick woods, moving by bounds in thin woods, crawling along ditches, and crossing gaps together.
 (ii) How careful they were not to make noises with their feet.
 (iii) How, at night, they stopped often to listen, and avoided skylines.
 (iv) How they carried their weapons to suit the different cover.
- (g) Use of landmarks.—How they used the fallen tree to mark where they had hidden the officer's body and their boat.
- (h) A simple ambush:—
 (i) The deductions that led them to choose the position.
 (ii) How they made sure they had a good "get away".
 (iii) How they approached it from behind.
 (iv) How they concealed themselves in it.
- (j) Alertness:—
 (i) How they were always on the lookout for the enemy.
 (ii) How at least one of them was always on guard.
- (k) Challenging.—How they did it.
- (l) Reporting of information:—
 (i) How they passed on every scrap of information, however trivial.
 (ii) How the identification that they obtained revealed a most important fact about the enemy.

SECTION 10.—FIELD CRAFT TESTS

AIM

1. To test men individually in fieldcraft, handling and shooting.

DRESS AND STORES

2. Battle order. Weapons, ammunition and stores according to the test.

NOTES

3. Tests must be realistic, but simple to organize and run.
4. **Marking:—**
 (a) Give each tester a form containing a list of the points that you want him to attend to; this helps to make marking both objective and uniform.

- (b) The lists that follow are not exhaustive, nor will all points apply to every test; nevertheless they may help you to produce a form for marking.

(i) Fieldcraft

Reconnaissance before movement.	Route chosen, and why.
Method of movement.	Camouflage.
Risks—were they justified and were they taken early?	Direction keeping.
Cover in the OP.	Concealment.
Field of fire.	Cover in fire positions.
Speed in locating targets.	System of searching ground.
Judging distance.	Recognition of targets.
Movement to alternative position.	Action on coming under fire.
	Agressiveness.

(ii) Handling

Preparation of weapon.	Carriage of arms.
Use of safety devices.	Care of arms.
Mounting of LMGs.	Clean handling.
Resting of rifles on cover.	Observation of fire, and action taken.
Sight adjustment.	Rate of fire.
Holding.	Counting of rounds.
Allowance for wind and movement.	
Speed in bringing fire to bear.	Care of ammunition.
Reloading.	Over-exposure of man or weapon.
Use of equipment and accessories.	
Action on jams and stoppages.	

(iii) Shooting

Results.	Determination.
Reaction to a miss.	Timing.
Anticipation of wind changes.	Anticipation of exposures.
Application of group.	Confidence.
Control of breathing.	Alertness.
Gun shyness.	

5. You can test as many men at one time as testers and targets allow.

6. No tests are laid down, but there should be no difficulty in adapting exercises from Infantry Training, Volume I, Pamphlet No. 11, 1949 (WO Code No. 8413), as tests.

CONCLUSION

7. Record, discuss and publish each man's results.